GenCore version 5.1.6

OM nucleic - nucleic search, using sw model

Run on: July 12, 2003, 19:35:59 ; Search time 233 Seconds
(without alignments)
869.871 Million cell updates/sec

Title: US-09-910-757-1
Perfect score: 90
Sequence: 1 gggagacggcggcggtggcg.....cggtgccccgcgcagggtcg 90

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 2185239 seqs, 1125999159 residues

Total number of hits satisfying chosen parameters: 4370478

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : N_Geneseq_101002:*
1: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1980.DAT:*
2: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1981.DAT:*
3: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1982.DAT:*
4: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1983.DAT:*
5: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1984.DAT:*
6: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1985.DAT:*
7: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1986.DAT:*
8: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1987.DAT:*
9: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1988.DAT:*
10: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1989.DAT:*
11: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1990.DAT:*
12: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1991.DAT:*
13: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1992.DAT:*
14: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1993.DAT:*
15: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1994.DAT:*
16: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1995.DAT:*
17: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1996.DAT:*
18: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1997.DAT:*
19: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1998.DAT:*
20: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1999.DAT:*
21: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA2000.DAT:*
22: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA2001A.DAT:*
23: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA2001B.DAT:*
24: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA2002.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	90	100.0	90	20	AAV72377	Human amyloid prec
	2	90	100.0	1721	14	AAQ54257	APP-REP 751 amyloi
	3	90	100.0	3353	9	AAN81234	Sequence of human
	4	90	100.0	3353	12	AAQ14097	Amyloid precursor
	5	90	100.0	3353	14	AAQ54258	Amyloid precursor
	6	90	100.0	3353	21	AAZ49951	Human beta amyloid
	7	90	100.0	3354	20	AAZ32219	Human beta amyloid
	8	90	100.0	3354	21	AAZ89477	Human APP DNA. Ho
	9	90	100.0	3414	23	AAS83274	DNA encoding novel
	10	90	100.0	3585	23	AAS83273	DNA encoding novel
	11	90	100.0	3621	23	ABV29298	Human prostate exp
	12	90	100.0	3648	23	AAS83276	DNA encoding novel
	13	90	100.0	8591	18	AAT87083	Plasmid pCLL602 en
	14	90	100.0	8591	18	AAT87084	Plasmid pCLL621 en
	15	90	100.0	8591	18	AAT84561	Plasmid pCLL602 en
	16	90	100.0	8591	18	AAT84562	Plasmid pCLL621 en
	17	90	100.0	8591	19	AAV05849	APP-REP 751 gene f
	18	90	100.0	8591	19	AAV05850	APP-REP 751 gene f
	19	90	100.0	8591	19	AAV04865	cDNA encoding amyl
	20	90	100.0	8591	19	AAV04866	cDNA encoding amyl
	21	89	98.9	3353	11	AAQ04496	Sequence of gene e
	22	88.4	98.2	3148	24	AAL47324	Amyloid precursor
	23	88.4	98.2	3148	24	ABK13303	DNA encoding amylo
	24	88.4	98.2	3238	23	AAS83275	DNA encoding novel
	25	88.4	98.2	3520	20	AAX77504	Human beta-amyloid
	26	81.2	90.2	255	22	AAC92095	Human APP exon 1 p
	27	66	73.3	500	24	ABQ32436	Oligonucleotide fo
c	28	66	73.3	500	24	ABQ32437	Oligonucleotide fo
	29	66	73.3	507	24	ABQ32766	Oligonucleotide fo
c	30	66	73.3	507	24	ABQ32767	Oligonucleotide fo
	31	66	73.3	1286	24	ABL34250	Human immune syste
c	32	51.8	57.6	500	24	ABQ32434	Oligonucleotide fo
	33	51.8	57.6	500	24	ABQ32435	Oligonucleotide fo
c	34	51.8	57.6	507	24	ABQ32768	Oligonucleotide fo
	35	51.8	57.6	507	24	ABQ32769	Oligonucleotide fo
c	36	51.8	57.6	1286	24	ABL34251	Human immune syste
	37	50	55.6	596	12	AAQ11374	Amyloid precursor
	38	50	55.6	3804	12	AAQ11434	A4 amyloid precurs
	39	45	50.0	2949	10	AAN91050	Sequence encoding
	40	45	50.0	2949	11	AAQ05086	Sequence encodes N
	41	45	50.0	3006	10	AAN91049	Sequence encoding
	42	45	50.0	3006	11	AAQ05085	Sequence encodes N
	43	37	41.1	156	22	AAD13971	Rat amyloid precur
	44	34.2	38.0	495	21	AAA39492	Human APP intron,
	45	34.2	38.0	1772	21	AAA39494	Transgenic unc-119

ALIGNMENTS

RESULT 1
AAV72377
ID AAV72377 standard; cDNA; 90 BP.
XX
AC AAV72377;
XX
DT 02-AUG-1999 (first entry)
XX
DE Human amyloid precursor gene translation enhancer element cDNA.
XX
KW APP; amyloid precursor protein; translation enhancer element;
KW treatment; Alzheimer's disease; suppressor; ss.
XX
OS Homo sapiens.
XX
PN WO9924595-A1.
XX
PD 20-MAY-1999.
XX
PF 09-NOV-1998; 98WO-US23873.
XX
PR 12-NOV-1997; 97US-0065175.
XX
PA (BGHM) BRIGHAM & WOMENS HOSPITAL.
XX
PI Rogers J;
XX
DR WPI; 1999-347284/29.
XX
PT Enhancing translation of the human amyloid precursor protein (APP)
PT gene, using a substantially pure DNA molecule
XX

```
PS   Claim 1a; Page 24; 27pp; English.
XX
CC   This invention describes the human amyloid precursor protein (APP) gene
CC   translation enhancer element which can be operably linked to a
CC   non-homologous gene. The DNA element is useful for treating Alzheimer's
CC   disease as it enables suppression of APP expression in patients with
CC   the disease. It can also be used for controlling the production of
CC   recombinant genes in vitro and in vivo.
XX
SQ   Sequence 90 BP; 14 A; 30 C; 40 G; 6 T; 0 other;

  Query Match            100.0%;  Score 90;  DB 20;  Length 90;
  Best Local Similarity  100.0%;  Pred. No. 2.8e-14;
  Matches   90;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 60

Qy         61 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 90
              ||||||||||||||||||||||||||||||
Db         61 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 90


RESULT 2
AAQ54257
ID   AAQ54257 standard; DNA; 1721 BP.
XX
AC   AAQ54257;
XX
DT   20-JUN-1994  (first entry)
XX
DE   APP-REP 751 amyloid precursor protein/reporter protein.
XX
KW   Amyloid precursor protein; APP; beta amyloid protein; BAP;
KW   detection; Alzheimer's disease; Down's syndrome; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             196..1674
FT                   /*tag= a
FT                   /product= APP-REP 751 protein.
XX
PN   AU9338358-A.
XX
PD   04-NOV-1993.
XX
PF   03-MAY-1993;   93AU-0038358.
XX
PR   01-MAY-1992;   92US-0877675.
XX
PA   (AMCY ) AMERICAN CYANAMID CO.
XX
PI   Jacobsen JS,  Vitek MP;
XX
DR   WPI; 1993-406194/51.
DR   P-PSDB; AAR45229.
XX
PT   New mutant forms of amyloid precursor protein - for detecting
PT   cpds. that modify activity of enzymes involved in precursor
PT   cleavage, also new nucleic acid encoding them
XX
PS   Claim 5; Figure 7; 66pp; English.
XX
CC   The mutant form of amyloid precursor protein encoded by this
CC   sequence comprises from the 5' to the 3' end a sequence encoding a
CC   marker and either (1) a sequence encoding the N-terminus of an
CC   amyloid precursor protein (APP) up to, but not including, the
CC   nucleotides encoding the beta amyloid protein (BAP) domain or (2)
CC   the BAP domain.  Recombinant polypeptides generated from this
CC   sequence can be used to detect drugs or compounds that
CC   inhibit/augment the activity of proteolytic enzymes which cleave
CC   APP to generate BAP fragments (deposition of which occurs in
CC   patients with Alzheimers disease and Down's syndrome).
XX
SQ   Sequence 1721 BP; 441 A; 408 C; 534 G; 338 T; 0 other;

  Query Match            100.0%;  Score 90;  DB 14;  Length 1721;
  Best Local Similarity  100.0%;  Pred. No. 2.5e-14;
  Matches   90;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        104 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 163

Qy         61 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 90
              ||||||||||||||||||||||||||||||
Db        164 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 193


RESULT 3
AAN81234
ID   AAN81234 standard; cDNA; 3353 BP.
XX
AC   AAN81234;
XX
DT   17-NOV-1990  (first entry)
XX
DE   Sequence of human amyloid plaque core (APC) precursor protein.
XX
KW   Alzheimer's disease; diagnosis; probe; hybridisation; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             147..2234
FT                   /*tag= a
FT   misc_feature    1962..1981
FT                   /*tag= b
FT                   /note="Used as basis for probe"
FT   polyA_signal    3080..3085
FT                   /*tag= c
FT   polyA_signal    3089..3095
FT                   /*tag= d
FT   polyA_signal    3338..3343
FT                   /*tag= e
FT   polyA_site      3353..
FT                   /*tag= f
XX
PN   EP276723-A.
XX
PD   03-AUG-1988.
XX
PF   19-JAN-1988;   88EP-0100647.
XX
PR   30-JAN-1987;   87DE-3702789.
XX
PA   (FARB ) BAYER AG.
XX
PI   Muller-Hill B,  Kang J,  Lemaire HG,  Unterbeck A;
XX
DR   WPI; 1988-214149/31.
DR   P-PSDB; AAP81692.
XX
PT   New DNA sequence for amyloid plaque core precursor protein -
PT   useful for diagnosing Alzheimer's disease
XX
PS   Claim 1; Fig 1a-c; 7pp; German.
XX
CC   A cDNA library was constructed in E.coli HB101 using poly-A tailed mRNA
CC   from foetal, human cerebral cortex and screened with a probe corresp. to
CC   AAs 10-16 of APC. The DNA sequence in AAN81234 and its functional
CC   equivalents, encoding the precursor protein of the amyloid plaque core
CC   (APC) polypeptide are new. Also new are:
CC   (1) fragments of this sequence;
```

```
CC   (2) APC precursor protein or its functional equivalents and fragments;
CC   (3) antibodies directed against this protein (or fragments); and
CC   (4) oligo probes derived from this DNA sequence.
CC   A pref. fragment of the sequence extends from approx. base 600-900; it
CC   includes an unusually high proportion of acidic AAs plus a sequence of
CC   7 Thr residues (bases 819-840), making it a very specific probe for
CC   hybridisation testing. The pref. antigenic sequence for raising Abs
CC   contains AAs 200-290 of the precursor polypeptide. The DNA sequence and
CC   fragments and antibodies are useful for diagnosis of Alzheimer's
CC   disease (even before clinical symptoms develop).
XX
SQ   Sequence 3353 BP; 922 A; 745 C; 867 G; 819 T; 0 other;

  Query Match             100.0%;  Score 90;  DB 9;  Length 3353;
  Best Local Similarity   100.0%;  Pred. No. 2.5e-14;
  Matches   90;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         55 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 114

Qy         61 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 90
              |||||||||||||||||||||||||||||
Db        115 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 144


RESULT 4
AAQ14097
ID   AAQ14097 standard; cDNA; 3353 BP.
XX
AC   AAQ14097;
XX
DT   06-JAN-1992  (first entry)
XX
DE   Amyloid precursor protein coding sequence cloned in pFC4.
XX
KW   APP-695; minigene; senile dementia; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             147..2234
FT                   /*tag= a
FT                   /product= APP-695
XX
PN   EP451700-A.
XX
PD   16-OCT-1991.
XX
PF   04-APR-1991;   91EP-0105332.
XX
PR   20-FEB-1991;   91US-0656248.
PR   10-APR-1990;   90US-0507705.
XX
PA   (MILE ) MILES INC.
XX
PI   Wirak DO,  Bayney R,  Ramabhadran TV,  Unterbeck A,  Rae P;
PI   Scangos G;
XX
DR   WPI; 1991-304748/42.
DR   P-PSDB; AAR14046.
XX
PT   Recombinant mini-gene expressing amyloid precursor protein - in
PT   cell and tissue specific manner in transgenic mice, as models for
PT   Alzheimer's disease
XX
PS   Example 3; Page 58 and f 1; 135pp; English.
XX
CC   Plasmid pFC4 was isolated from a cDNA library prepared from polyA
CC   RNA from brain cortex of a 5-month old aborted human foetus. Three
CC   probes were used for screening. The sequence of pFC4 corresponds to
CC   a full-length APP-695 coding sequence and is identical to the
CC   nucleotide sequence obtained as clone 9-110 by Kang et al., 1987,
CC   Nature 325:-733-736. A 1.4kb BamHI fragment of pFC4 was used to
CC   screen a human neuroblastoma library for other APP genes.
CC   See also AAQ13774-9.
XX
SQ   Sequence 3353 BP; 922 A; 745 C; 867 G; 819 T; 0 other;

  Query Match             100.0%;  Score 90;  DB 12;  Length 3353;
  Best Local Similarity   100.0%;  Pred. No. 2.5e-14;
  Matches   90;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         55 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 114

Qy         61 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 90
              |||||||||||||||||||||||||||||
Db        115 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 144


RESULT 5
AAQ54258
ID   AAQ54258 standard; DNA; 3353 BP.
XX
AC   AAQ54258;
XX
DT   20-JUN-1994  (first entry)
XX
DE   Amyloid precursor protein (APP 770) coding sequence.
XX
KW   Amyloid precursor protein; APP; beta amyloid protein; BAP;
KW   detection; Alzheimer's disease; Down's syndrome; ss.
XX
OS   Homo sapiens.
XX
PN   AU9338358-A.
XX
PD   04-NOV-1993.
XX
PF   03-MAY-1993;   93AU-0038358.
XX
PR   01-MAY-1992;   92US-0877675.
XX
PA   (AMCY ) AMERICAN CYANAMID CO.
XX
PI   Jacobsen JS,  Vitek MP;
XX
DR   WPI; 1993-406194/51.
XX
PT   New mutant forms of amyloid precursor protein - for detecting
PT   cpds. that modify activity of enzymes involved in precursor
PT   cleavage, also new nucleic acid encoding them
XX
PS   Claim 5; Figure 8; 66pp; English.
XX
CC   Recombinant polypeptides produced using the coding sequences of
CC   mutant forms of amyloid precursor proteins comprising from the 5' to
CC   the 3' end a sequence encoding a marker and either (1) a sequence
CC   encoding the N-terminus of an amyloid precursor protein (APP) up to,
CC   but not including, the nucleotides encoding the beta amyloid protein
CC   (BAP) domain or (2) the BAP domain, can be used to detect drugs or
CC   compounds that inhibit/augment the activity of proteolytic enzymes
CC   which cleave APP to generate BAP fragments (deposition of which
CC   occurs in patients with Alzheimers disease and Down's syndrome).
XX
SQ   Sequence 3353 BP; 922 A; 745 C; 868 G; 818 T; 0 other;

  Query Match             100.0%;  Score 90;  DB 14;  Length 3353;
  Best Local Similarity   100.0%;  Pred. No. 2.5e-14;
  Matches   90;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         55 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 114
```

```
Qy         61 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 90
              ||||||||||||||||||||||||||||||
Db        115 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 144
```

RESULT 6
AAZ49951
ID AAZ49951 standard; cDNA; 3353 BP.
XX
AC AAZ49951;
XX
DT 25-APR-2000 (first entry)
XX
DE Human beta amyloid precursor protein cDNA.
XX
KW Beta-amylase precursor protein; beta-APP; neuronal protein;
KW human lon-protease like protein; HsLON; diagnosis; treatment;
KW neurodegenerative disorder; Alzheimer's disease; dementia of trisomy 21;
KW Parkinson's disease; amylotrophic lateral sclerosis; cardiomyopathy;
KW diabetes; hearing loss; male infertility; gene therapy;
KW mitochondrial DNA mutation disorder; ss.
XX
OS Homo sapiens.
XX

FH	Key	Location/Qualifiers
FT	CDS	147..2234
FT		/*tag= a
FT		/product= "Beta amyloid precursor protein"
FT	misc_feature	1935..2060
FT		/*tag= b
FT		/label= Beta_A4
FT		/note= "Bait sequence that interacts with prey
FT		protein HsLON"

XX
PN WO200002911-A2.
XX
PD 20-JAN-2000.
XX
PF 08-JUL-1999; 99WO-US15592.
XX
PR 10-JUL-1998; 98US-0113348.
XX
PA (CURA-) CURAGEN CORP.
XX
PI Nandabalan K, Yang M, Schulz VP;
XX
DR WPI; 2000-171130/15.
DR P-PSDB; AAY44705.
XX
PT Screening for interactions between human beta amyloid precursor protein
PT and human lon-protease like protein, useful for treating
PT neurodegenerative disease -
XX
PS Example 1; Fig 1; 69pp; English.
XX
CC The present sequence encodes beta-amylase precursor protein (beta-APP),
CC a neuronal protein. Complex formed by the interaction of beta-APP and
CC the human lon-protease like protein (HsLON) may serve as a marker for
CC specific disease states that involve the disruption of physiological
CC processes in which beta-APP and HsLON are known to be involved. Methods
CC of screening for these complexes are used in diagnosis and treatment of
CC diseases like neurodegenerative disorders such as Alzheimer's disease,
CC dementia of trisomy 21, Parkinson's disease, amylotrophic lateral
CC sclerosis; cardiomyopathy; diabetes; hearing loss; male infertility; and
CC disorders associated with mitochondrial DNA mutations. The nucleic acid
CC sequence may be used for gene therapy.
XX
SQ Sequence 3353 BP; 922 A; 745 C; 867 G; 819 T; 0 other;

Query Match 100.0%; Score 90; DB 21; Length 3353;
Best Local Similarity 100.0%; Pred. No. 2.5e-14;
Matches 90; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         55 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 114

Qy         61 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 90
              ||||||||||||||||||||||||||||||
Db        115 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 144
```

RESULT 7
AAZ32219
ID AAZ32219 standard; cDNA; 3354 BP.
XX
AC AAZ32219;
XX
DT 13-JAN-2000 (first entry)
XX
DE Human beta amyloid precursor protein encoding cDNA.
XX
KW Human; beta amyloid precursor protein; APP; beta secretase inhibition;
KW alpha secretase; neurological disorder; Alzheimer's disease;
KW Downs syndrome; mutation; ss.
XX
OS Homo sapiens.
XX

FH	Key	Location/Qualifiers
FT	CDS	148..2235
FT		/*tag= a
FT		/product= "beta amyloid precursor protein"

XX
PN WO9951752-A1.
XX
PD 14-OCT-1999.
XX
PF 31-MAR-1999; 99WO-JP01701.
XX
PR 31-MAR-1998; 98JP-0101821.
XX
PA (CHUS) CHUGAI SEIYAKU KK.
XX
PI Ozawa K, Ikeda S, Tabira T;
XX
DR WPI; 1999-620208/53.
DR P-PSDB; AAY49690.
XX
PT A cell line which produces beta amyloid precursor protein, used in the
PT investigation of neurological disorders such as Alzheimer's disease -
XX
PS Disclosure; Page 35-41; 70pp; Japanese.
XX
CC The present invention describes a cell line which produces beta amyloid
CC precursor protein (APP) and expresses alpha secretase activity but
CC expresses beta secretase activity only under an external stimulus.
CC Also described is a cloning method for DNA encoding beta secretase,
CC comprising: (1) inserting a DNA library into the cell line, expressing
CC the inserted DNA, and selecting cells expressing beta secretase then
CC isolating the beta secretase DNA from them; or (2) isolating nucleic
CC acid from the cell line with or without external stimulation and
CC performing subtractive cloning to identify DNA expressed only under
CC stimulation. Products from the present invention may be used in the
CC investigation of neurological disorders such as Alzheimer's disease
CC and Downs syndrome and in particular the association of mutations of
CC the beta APP with them. The present sequence encodes human beta APP.
XX
SQ Sequence 3354 BP; 922 A; 745 C; 868 G; 819 T; 0 other;

Query Match 100.0%; Score 90; DB 20; Length 3354;
Best Local Similarity 100.0%; Pred. No. 2.5e-14;
Matches 90; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
```

```
Db         56 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 115

Qy         61 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 90
              ||||||||||||||||||||||||||||||
Db        116 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 145


RESULT 8
AAZ89477
ID   AAZ89477 standard; DNA; 3354 BP.
XX
AC   AAZ89477;
XX
DT   22-JUN-2000  (first entry)
XX
DE   Human APP DNA.
XX
KW   APP; amyloid precursor protein; gamma-secretase; neuroprotective;
KW   nootropic; transgenic; Alzheimer's disease; Down's syndrome; human; ds.
XX
OS   Homo sapiens.
XX
PN   DE19856261-C1.
XX
PD   30-MAR-2000.
XX
PF   07-DEC-1998;   98DE-1056261.
XX
PR   07-DEC-1998;   98DE-1056261.
XX
PA   (HMRI ) HOECHST MARION ROUSSEL DEUT GMBH.
XX
PI   Peraus G;
XX
DR   WPI; 2000-258119/23.
XX
PT   Detection of gamma-secretase by detection of A-beta peptide useful for
PT   determining gamma-secretase activity and for identifying inhibitors -
XX
PS   Disclosure; Page 9; 16pp; German.
XX
CC   This invention describes a novel method for the detection of human
CC   gamma-secretase by detection of a partial protein formed by cleavage of
CC   a fusion protein encoded by a transgene containing a first nucleotide
CC   sequence which encodes a protein comprising the amino acid sequence (A)
CC   and a second nucleotide sequence which encodes a signal peptide. The
CC   products of the invention have neuroprotective and nootropic activity.
CC   The method is used to detect activity of gamma-secretase. The transgene
CC   and/or vectors are useful for the production of a transgenic cell or
CC   C. elegans. Transgenic C. elegans is useful in a method for the
CC   determination of gamma-secretase activity. The transgenic C. elegans is
CC   also useful in a method to identify inhibitors of the gamma-secretase
CC   activity. The methods and transgenes are useful in research of
CC   Alzheimer's disease. Inhibitors of gamma-secretase are useful in
CC   control/treatment of Alzheimer's and possibly Down's syndrome. This
CC   sequence encodes the human amyloid precursor protein (APP) which is
CC   described in the method of the invention.
XX
SQ   Sequence 3354 BP; 922 A; 745 C; 868 G; 819 T; 0 other;

  Query Match             100.0%;  Score 90;  DB 21;  Length 3354;
  Best Local Similarity   100.0%;  Pred. No. 2.5e-14;
  Matches   90;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         56 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 115

Qy         61 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 90
              ||||||||||||||||||||||||||||||
Db        116 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 145


RESULT 9
AAS83274
ID   AAS83274 standard; cDNA; 3414 BP.
XX
AC   AAS83274;
XX
DT   13-FEB-2002  (first entry)
XX
DE   DNA encoding novel human diagnostic protein #19078.
XX
KW   Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW   food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200175067-A2.
XX
PD   11-OCT-2001.
XX
PF   30-MAR-2001; 2001WO-US08631.
XX
PR   31-MAR-2000; 2000US-0540217.
PR   23-AUG-2000; 2000US-0649167.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Drmanac RT,  Liu C,  Tang YT;
XX
DR   WPI; 2001-639362/73.
DR   P-PSDB; ABG19087.
XX
PT   New isolated polynucleotide and encoded polypeptides, useful in
PT   diagnostics, forensics, gene mapping, identification of mutations
PT   responsible for genetic disorders or other traits and to assess
PT   biodiversity -
XX
PS   Claim 1; SEQ ID No 19078; 103pp; English.
XX
CC   The invention relates to isolated polynucleotide (I) and
CC   polypeptide (II) sequences. (I) is useful as hybridisation probes,
CC   polymerase chain reaction (PCR) primers, oligomers, and for chromosome
CC   and gene mapping, and in recombinant production of (II). The
CC   polynucleotides are also used in diagnostics as expressed sequence tags
CC   for identifying expressed genes. (I) is useful in gene therapy techniques
CC   to restore normal activity of (II) or to treat disease states involving
CC   (II). (II) is useful for generating antibodies against it, detecting or
CC   quantitating a polypeptide in tissue, as molecular weight markers and as
CC   a food supplement. (II) and its binding partners are useful in medical
CC   imaging of sites expressing (II). (I) and (II) are useful for treating
CC   disorders involving aberrant protein expression or biological activity.
CC   The polypeptide and polynucleotide sequences have applications in
CC   diagnostics, forensics, gene mapping, identification of mutations
CC   responsible for genetic disorders or other traits to assess biodiversity
CC   and to produce other types of data and products dependent on DNA and
CC   amino acid sequences. AAS64197-AAS94564 represent novel human
CC   diagnostic coding sequences of the invention.
CC   Note: The sequence data for this patent did not appear in the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 3414 BP; 915 A; 806 C; 940 G; 753 T; 0 other;

  Query Match             100.0%;  Score 90;  DB 23;  Length 3414;
  Best Local Similarity   100.0%;  Pred. No. 2.5e-14;
  Matches   90;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        608 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 667

Qy         61 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 90
              ||||||||||||||||||||||||||||||
Db        668 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 697
```

```
RESULT 10
AAS83273
ID   AAS83273 standard; cDNA; 3585 BP.
XX
AC   AAS83273;
XX
DT   13-FEB-2002  (first entry)
XX
DE   DNA encoding novel human diagnostic protein #19077.
XX
KW   Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW   food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200175067-A2.
XX
PD   11-OCT-2001.
XX
PF   30-MAR-2001; 2001WO-US08631.
XX
PR   31-MAR-2000; 2000US-0540217.
PR   23-AUG-2000; 2000US-0649167.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Drmanac RT,  Liu C,  Tang YT;
XX
DR   WPI; 2001-639362/73.
DR   P-PSDB; ABG19086.
XX
PT   New isolated polynucleotide and encoded polypeptides, useful in
PT   diagnostics, forensics, gene mapping, identification of mutations
PT   responsible for genetic disorders or other traits and to assess
PT   biodiversity  -
XX
PS   Claim 1; SEQ ID No 19077; 103pp; English.
XX
CC   The invention relates to isolated polynucleotide (I) and
CC   polypeptide (II) sequences. (I) is useful as hybridisation probes,
CC   polymerase chain reaction (PCR) primers, oligomers, and for chromosome
CC   and gene mapping, and in recombinant production of (II). The
CC   polynucleotides are also used in diagnostics as expressed sequence tags
CC   for identifying expressed genes. (I) is useful in gene therapy techniques
CC   to restore normal activity of (II) or to treat disease states involving
CC   (II). (II) is useful for generating antibodies against it, detecting or
CC   quantitating a polypeptide in tissue, as molecular weight markers and as
CC   a food supplement. (II) and its binding partners are useful in medical
CC   imaging of sites expressing (II). (I) and (II) are useful for treating
CC   disorders involving aberrant protein expression or biological activity.
CC   The polypeptide and polynucleotide sequences have applications in
CC   diagnostics, forensics, gene mapping, identification of mutations
CC   responsible for genetic disorders or other traits to assess biodiversity
CC   and to produce other types of data and products dependent on DNA and
CC   amino acid sequences. AAS64197-AAS94564 represent novel human
CC   diagnostic coding sequences of the invention.
CC   Note: The sequence data for this patent did not appear in the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 3585 BP; 976 A; 806 C; 932 G; 871 T; 0 other;

  Query Match           100.0%;  Score 90;  DB 23;  Length 3585;
  Best Local Similarity  100.0%;  Pred. No. 2.5e-14;
  Matches   90;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         56 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 115

Qy         61 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 90
              ||||||||||||||||||||||||||||||
Db        116 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 145


RESULT 11
ABV29298
ID   ABV29298 standard; cDNA; 3621 BP.
XX
AC   ABV29298;
XX
DT   16-SEP-2002  (first entry)
XX
DE   Human prostate expression marker cDNA 29289.
XX
KW   Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker;
KW   pharmacogenomic marker; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO200160860-A2.
XX
PD   23-AUG-2001.
XX
PF   20-FEB-2001; 2001WO-US05171.
XX
PR   17-FEB-2000; 2000US-183319P.
PR   16-MAR-2000; 2000US-189862P.
PR   25-MAY-2000; 2000US-207454P.
PR   09-JUN-2000; 2000US-211314P.
PR   18-JUL-2000; 2000US-219007P.
PR   13-DEC-2000; 2000US-255281P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Schlegel R,  Endege WO,  Monahan JE;
XX
DR   WPI; 2001-662795/76.
XX
PT   Novel isolated nucleic acid molecule associated with cancerous state of
PT   prostate cells and correlating with presence of prostate cancer, useful
PT   for detecting presence of prostate cancer, stage of prostate cancer  -
XX
PS   Claim 1; Page 6261; 11750pp; English.
XX
CC   The invention relates to an isolated nucleic acid molecule (I) comprising
CC   a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the
CC   specification or its complement. (I) is useful for:
CC   (a) assessing whether a patient is afflicted with prostate cancer;
CC   (b) monitoring the progression of prostate cancer in a patient;
CC   (c) assessing the efficacy of a test compound to inhibit prostate
CC   cancer in a patient;
CC   (d) assessing the efficacy of a therapy for inhibiting prostate cancer
CC   in a patient;
CC   (e) selecting a composition for inhibiting prostate cancer in a patient;
CC   (f) assessing the prostate cell carcinogenic potential of a compound;
CC   (g) determining whether prostate cancer has metastasized in a patient;
CC   (h) assessing the aggressiveness or indolence of prostate cancer in a
CC   patient;
CC   (I) is also useful as a pharmacodyanamic or pharmacogenomic marker.
XX
SQ   Sequence 3621 BP; 993 A; 815 C; 941 G; 872 T; 0 other;

  Query Match           100.0%;  Score 90;  DB 23;  Length 3621;
  Best Local Similarity  100.0%;  Pred. No. 2.5e-14;
  Matches   90;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         80 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 139

Qy         61 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 90
              ||||||||||||||||||||||||||||||
Db        140 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 169
```

```
RESULT 12
AAS83276
ID   AAS83276 standard; cDNA; 3648 BP.
XX
AC   AAS83276;
XX
DT   13-FEB-2002  (first entry)
XX
DE   DNA encoding novel human diagnostic protein #19080.
XX
KW   Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW   food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200175067-A2.
XX
PD   11-OCT-2001.
XX
PF   30-MAR-2001; 2001WO-US08631.
XX
PR   31-MAR-2000; 2000US-0540217.
PR   23-AUG-2000; 2000US-0649167.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Drmanac RT,  Liu C,  Tang YT;
XX
DR   WPI; 2001-639362/73.
DR   P-PSDB; ABG19089.
XX
PT   New isolated polynucleotide and encoded polypeptides, useful in
PT   diagnostics, forensics, gene mapping, identification of mutations
PT   responsible for genetic disorders or other traits and to assess
PT   biodiversity  -
XX
PS   Claim 1; SEQ ID No 19080; 103pp; English.
XX
CC   The invention relates to isolated polynucleotide (I) and
CC   polypeptide (II) sequences. (I) is useful as hybridisation probes,
CC   polymerase chain reaction (PCR) primers, oligomers, and for chromosome
CC   and gene mapping, and in recombinant production of (II). The
CC   polynucleotides are also used in diagnostics as expressed sequence tags
CC   for identifying expressed genes. (I) is useful in gene therapy techniques
CC   to restore normal activity of (II) or to treat disease states involving
CC   (II). (II) is useful for generating antibodies against it, detecting or
CC   quantitating a polypeptide in tissue, as molecular weight markers and as
CC   a food supplement. (II) and its binding partners are useful in medical
CC   imaging of sites expressing (II). (I) and (II) are useful for treating
CC   disorders involving aberrant protein expression or biological activity.
CC   The polypeptide and polynucleotide sequences have applications in
CC   diagnostics, forensics, gene mapping, identification of mutations
CC   responsible for genetic disorders or other traits to assess biodiversity
CC   and to produce other types of data and products dependent on DNA and
CC   amino acid sequences. AAS64197-AAS94564 represent novel human
CC   diagnostic coding sequences of the invention.
CC   Note: The sequence data for this patent did not appear in the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 3648 BP; 969 A; 837 C; 946 G; 893 T; 3 other;

  Query Match           100.0%;  Score 90;  DB 23;  Length 3648;
  Best Local Similarity  100.0%;  Pred. No. 2.4e-14;
  Matches   90;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        128 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 187

Qy         61 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 90
                ||||||||||||||||||||||||||||||
Db        188 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 217


RESULT 13
AAT87083
ID   AAT87083 standard; cDNA; 8591 BP.
XX
AC   AAT87083;
XX
DT   06-JAN-1998  (first entry)
XX
DE   Plasmid pCLL602 encoding amyloid precursor protein APP-REP 751.
XX
KW   Amyloid precursor protein; APP; beta-amyloid protein; BAP;
KW   substrate; mutein; secretase; Alzheimer's disease; human;
KW   APP-REP 751; pCLL602; ds; cyclic.
XX
OS   Chimeric Homo sapiens.
OS   Chimeric synthetic.
XX
FH   Key             Location/Qualifiers
FT   CDS             2393..3871
FT                   /*tag=  a
XX
PN   US5656477-A.
XX
PD   12-AUG-1997.
XX
PF   01-MAY-1992;   92US-0877675.
XX
PR   20-SEP-1993;   93US-0123659.
PR   01-MAY-1992;   92US-0877675.
XX
PA   (AMCY ) AMERICAN CYANAMID CO.
XX
PI   Jacobsen JS,  Vitek MP;
XX
DR   WPI; 1997-414594/38.
DR   P-PSDB; AAW26509.
XX
PT   Nucleic acid encoding amyloid precursor mutein(s)  - comprising
PT   reporter gene and coding sequence, for identifying compounds which
PT   modify the activity of proteolytic enzymes which cleave APP
XX
PS   Disclosure; Fig 7; 84pp; English.
XX
CC   Plasmid pCLL602 (AAT87083), desposited in E. coli as ATCC 69405,
CC   codes for an amyloid precursor protein (APP) substrate, designated
CC   APP-REP 751 (see AAW26509), that has a 276-amino acid deletion of the
CC   native APP and carries Substance P and Met-enkephalin epitope
CC   markers placed, respectively, on the N-terminal and C-terminal
CC   sites of the beta-amyloid protein (BAP) domain.  APP-REP 751 can
CC   be used in a claimed method for screening for a compound which
CC   reduces the formation of beta-amyloid protein, determined by
CC   measuring the amount of marker in a medium containing transfected
CC   cells.  The method is used to detect compounds which inhibit the
CC   activity of proteolytic enzymes which cleave APP to generate BAP
CC   fragments.  Such compounds can be used in the treatment of e.g.
CC   Alzheimer's disease.  The deletion of a 276 amino acid portion of
CC   APP distinguishes the construct from endogenously expressed APP,
CC   and beneficially increases the resolution of APP-REP fragments
CC   resulting from the proteolytic cleavage by secretase or other
CC   amyloidogenic, BAP-generating cleavage events.
XX
SQ   Sequence 8591 BP; 2225 A; 2038 C; 2247 G; 2081 T; 0 other;

  Query Match           100.0%;  Score 90;  DB 18;  Length 8591;
  Best Local Similarity  100.0%;  Pred. No. 2.4e-14;
  Matches   90;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
```

```
Db       2301 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 2360

Qy         61 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 90
              |||||||||||||||||||||||||||||
Db       2361 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 2390
```

RESULT 14
AAT87084
ID AAT87084 standard; cDNA; 8591 BP.
XX
AC AAT87084;
XX
DT 06-JAN-1998 (first entry)
XX
DE Plasmid pCLL621 encoding amyloid precursor protein APP-REP 751.
XX
KW Amyloid precursor protein; APP; beta-amyloid protein; BAP;
KW substrate; mutein; secretase; Alzheimer's disease; human;
KW APP-REP 751; pCLL621; ds; cyclic.
XX
OS Chimeric Homo sapiens.
OS Chimeric synthetic.
XX
FH Key   Location/Qualifiers
FT CDS   2393..3856
FT   /*tag= a
XX
PN US5656477-A.
XX
PD 12-AUG-1997.
XX
PF 01-MAY-1992; 92US-0877675.
XX
PR 20-SEP-1993; 93US-0123659.
PR 01-MAY-1992; 92US-0877675.
XX
PA (AMCY) AMERICAN CYANAMID CO.
XX
PI Jacobsen JS, Vitek MP;
XX
DR WPI; 1997-414594/38.
DR P-PSDB; AAW26510.
XX
PT Nucleic acid encoding amyloid precursor mutein(s) - comprising
PT reporter gene and coding sequence, for identifying compounds which
PT modify the activity of proteolytic enzymes which cleave APP
XX
PS Disclosure; Fig 8; 84pp; English.
XX
CC Plasmid pCLL621 (AAT87084), desposited in E. coli as ATCC 69406,
CC codes for an amyloid precursor protein (APP) substrate, designated
CC APP-REP 751 (see AAW26510), that has a 276-amino acid deletion of the
CC native APP and carries a Substance P epitope marker on the N-terminal
CC side of the beta-amyloid protein (BAP) domain. APP-REP 751 can
CC be used in a claimed method for screening for a compound which
CC reduces the formation of beta-amyloid protein, determined by
CC measuring the amount of marker in a medium containing transfected
CC cells. The method is used to detect compounds which inhibit the
CC activity of proteolytic enzymes which cleave APP to generate BAP
CC fragments. Such compounds can be used in the treatment of e.g.
CC Alzheimer's disease. The deletion of a 276 amino acid portion of
CC APP distinguishes the construct from endogenously expressed APP,
CC and beneficially increases the resolution of APP-REP fragments
CC resulting from the proteolytic cleavage by secretase or other
CC amyloidogenic, BAP-generating cleavage events.
XX
SQ Sequence 8591 BP; 2225 A; 2038 C; 2247 G; 2081 T; 0 other;

```
Query Match             100.0%;  Score 90;  DB 18;  Length 8591;
Best Local Similarity   100.0%;  Pred. No. 2.4e-14;
Matches   90;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
```

```
Qy          1 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2301 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 2360

Qy         61 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 90
              |||||||||||||||||||||||||||||
Db       2361 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 2390
```

RESULT 15
AAT84561
ID AAT84561 standard; cDNA; 8591 BP.
XX
AC AAT84561;
XX
DT 15-DEC-1997 (first entry)
XX
DE Plasmid pCLL602 encoding amyloid precursor protein APP-REP 751.
XX
KW Amyloid precursor protein; APP; beta-amyloid protein; BAP;
KW substrate; mutein; secretase; Alzheimer's disease; human;
KW APP-REP 751; pCLL602; ds; cyclic.
XX
OS Chimeric Homo sapiens;
OS Chimeric synthetic.
XX
FH Key   Location/Qualifiers
FT CDS   2393..3871
FT   /*tag= a
XX
PN US5652092-A.
XX
PD 29-JUL-1997.
XX
PF 01-MAY-1992; 92US-0877675.
XX
PR 20-SEP-1993; 93US-0123659.
PR 01-MAY-1992; 92US-0877675.
PR 05-JUN-1995; 95US-0462859.
XX
PA (AMCY) AMERICAN CYANAMID CO.
XX
PI Jacobsen JS, Vitek MP;
XX
DR WPI; 1997-392937/36.
DR P-PSDB; AAW26393.
XX
PT Screening for compounds which reduce beta-amyloid protein formation
PT - using cells which express a construct encoding a marker and an
PT amyloid precursor mutein derived from APP isoforms
XX
PS Disclosure; Fig 7; 84pp; English.
XX
CC Plasmid pCLL602 (AAT84561), desposited in E. coli as ATCC 69405,
CC codes for an amyloid precursor protein (APP) substrate, designated
CC APP-REP 751 (see AAW26393), that has a 276-amino acid deletion of the
CC native APP and carries Substance P and Met-enkephalin epitope
CC markers placed, respectively, on the N-terminal and C-terminal
CC sites of the beta-amyloid protein (BAP) domain. APP-REP 751 can
CC be used in a claimed method for screening for a compound which
CC reduces the formation of beta-amyloid protein, determined by
CC measuring the amount of marker in a medium containing transfected
CC cells. The method is used to detect compounds which inhibit the
CC activity of proteolytic enzymes which cleave APP to generate BAP
CC fragments. Such compounds can be used in the treatment of e.g.
CC Alzheimer's disease. The deletion of a 276 amino acid portion of
CC APP distinguishes the construct from endogenously expressed APP,
CC and beneficially increases the resolution of APP-REP fragments
CC resulting from the proteolytic cleavage by secretase or other
CC amyloidogenic, BAP-generating cleavage events.
XX
SQ Sequence 8591 BP; 2225 A; 2038 C; 2247 G; 2081 T; 0 other;

Query Match 100.0%; Score 90; DB 18; Length 8591;
Best Local Similarity 100.0%; Pred. No. 2.4e-14;
Matches 90; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 60
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2301 GGGAGACGGCGGCGGTGGCGGCGCGGGCAGAGCAAGGACGCGGCGGATCCCACTCGCACA 2360

Qy         61 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 90
              |||||||||||||||||||||||||||||
Db       2361 GCAGCGCACTCGGTGCCCCGCGCAGGGTCG 2390
```

Search completed: July 12, 2003, 21:15:36
Job time : 236 secs